then forcibly separating the mold from the base material to transcribe a reverse pattern of the concavo-convex pattern to the surface of the base material,

wherein when assuming a temperature for pressing the mold against the base material as T_1 (°C), a temperature for separating the mold from the base material as T_2 (°C), thermal expansion coefficients of the mold and the base material as α_a and α_b, and the maximum distance between the transcription center of the transcription face and the concavo-convex pattern as d (mm), the following relations (1), (2), and (3):

$$T_1 \geq T_2 \quad \ldots(1)$$

$$|\alpha_a - \alpha_b| \cdot (T_1 - T_2) \cdot d \leq 4 \times 10^{-2} \quad \ldots(2)$$

$$|\alpha_a - \alpha_b| \geq 50 \times 10^{-7}/°C \quad \ldots(3)$$

are simultaneously satisfied.

B1

9. (amended) A micro-shape transcription apparatus comprising:

a first mold means provided with a transcription face having a micro-shape;

a second mold means facing the first mold means and holding a base material thereon;

B2

a mechanism for driving at least one of the first and second mold means;

a heating source for controlling temperatures of the first and second mold means such that when a temperature for pressing the transcription face against the base material is T_1 (°C), a temperature for separating the transcription face from the base material is T_2 (°C), thermal expansion coefficients of the transcription face and the base material are α_a and α_b, and a maximum distance between a transcription center of the transcription face and a concavo-convex pattern is d (mm), the following relations (1), (2), and (3):

$T_1 \geq T_2$ ...(1)

$|\alpha_a - \alpha_b| \cdot (T_1 - T_2) \cdot d \leq 4 \times 10^{-2}$ ...(2)

$|\alpha_a - \alpha_b| \geq 50 \times 10^{-7}/°C$ ...(3)

are simultaneously satisfied; and

a vacuum chuck for attracting and fixing the base material to the second mold means.

16. (amended) The micro-shape transcription apparatus according to claim 9, wherein T_1 is 160°C and T_2 ranges from 100-140°C.

17. (amended) The micro-shape transcription apparatus according to claim 9, wherein T_1 is 180° C and T_2 ranges from 100-150° C.

Please cancel claim 4 without prejudice.

Please add new claim 18 as follows.

--18. (New) A mold for a micro-shape transcription apparatus that molds a base material having a thermal expansive coefficient of α_b at a temperature T_1 and that separates said mold from the base material while the base material is at a temperature T_2 where $T_1 \geq T_2$, said mold comprising:

a material having a thermal expansion coefficient of α_a, and

a transcription face having a maximum distance d between a transcription center of the transcription face and a concavo-convex pattern of the transcription face,